

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for upgrading a software, comprising:

a version comparing unit for comparing a version of a software code included in a an advertisement broadcasting signal and a version of a previously installed software code ~~to determine a newer version~~; and

an upgrade processing unit for installing ~~the software~~ associated with the software code ~~by abstracting software data in the software code~~ if the version of the software code is ~~a new~~ newer version ~~than the version of the~~ previously installed software code.

2. (Currently Amended) The apparatus of claim 1, wherein the software code includes ~~a~~ data of an upgraded system software.

3. (Original) The apparatus of claim 1, wherein the software is a system software to be installed in an apparatus for receiving digital broadcasting.

4. (Cancelled)

5. (Original) The apparatus of claim 1, wherein the software is an upgraded software.

6. (Currently Amended) The apparatus of claim 1, further comprising:
a code detecting unit for detecting whether the software code is inserted in the advertisement broadcasting signal.

7. (Currently Amended) The apparatus of claim 1, further comprising:
a mode setting unit for setting a download-possible mode by determining whether the ~~code of the system~~ software code can be downloaded when ~~an~~ the advertisement broadcasting signal in which the software code is inserted is received.

8. (Original) The apparatus of claim 1, further comprising:
a storage unit for storing the software code.

9. (Currently Amended) The apparatus of claim 1, further comprising:
an error detecting unit for determining whether an error exists in the ~~stored software code~~ included in the advertisement broadcasting signal.

10. (Currently Amended) The apparatus of claim 1, the ~~broadcasting signal is an advertisement~~ broadcasting signal ~~corresponding~~ corresponds to an advertisement of a certain company.

11. (Currently Amended) A method for upgrading a software, comprising the steps of:

receiving a ~~an advertisement~~ advertisement broadcasting signal in which a user data containing a software code is inserted; and

installing ~~the software by abstracting software data from the software code~~ associated with the software code.

12. (Cancelled)

13. (Original) The method of claim 11, wherein the software is a system software to be installed in an apparatus for receiving digital broadcasting.

14. (Currently Amended) The method of claim 11, further comprising a step of:

checking whether the software code corresponds to a model of ~~the a~~ receiving apparatus ~~is received~~ or an error exists when the advertisement broadcasting signal in which the software code is inserted is received.

15. (Currently Amended) The method of claim 11, further comprising a step of:

comparing a version of the software code and a version of the code of a previously installed software code ~~to determine a newer version.~~

16. (Currently Amended) The method of ~~claim 11~~ claim 15, further comprising a step of:

deleting the received software code if the version of the software code is not newer than the version of the previously installed software code; ~~in case a version of the software code is not a new version~~ and

checking whether the software will be upgraded in case the version of the software code is newer than the version of the previously installed software code ~~the version is a new version.~~

17. (Original) The method of claim 11, wherein the software is installed or deleted according to a response of a user.

18. (Original) The method of claim 11, wherein the user data includes:
a header block including basic index information on the software; and
a payload block including the software code.

19. (Original) The method of claim 18, wherein the header block and payload block are formed in a packet form.

20. (Currently Amended) The method of claim 18, wherein the header block comprises:

an applied receiver description code block for checking a receiving apparatus which performs software upgrade by recording a brand name and a model number of ~~the~~ a receiving apparatus;

a version number block for showing version information of the software code;

a current packet number block for showing an order of the current packets when receiving the software code divided into a number of packets;

a last packet number block for checking the total number of the packets;

a status flag block for recording an error correction type and information of beginning and ending address of a target memory;

a payload length block for recording the length of a payload; and

a software version information block for recording guide information about the code version of the software.

21. (Currently Amended) The method of claim 18, wherein the payload block comprises:

a software code unit for recording the ~~code of the software~~ code which is divided into packet units with a certain size; and

an error check block for checking whether an error exists in the ~~received packet~~ units and correcting the error.

22-27. (Cancelled)

28. (Currently Amended) An apparatus for upgrading a software, comprising:

a code detecting unit for receiving a digital advertisement broadcasting signal and detecting whether the software code is inserted in the digital advertisement broadcasting signal;

a mode setting unit for setting a download-possible mode by determining whether the ~~system~~ software code ~~can be downloaded~~ is downloadable;

a storage unit for downloading and storing the ~~code of the system~~ software code in case of the download-possible mode;

an error detecting unit for determining whether an error exists in the ~~stored code of the system~~ downloaded software code;

a version comparing unit for comparing a version of ~~the code of the~~ downloaded software code and a version of ~~the code of a~~ previously installed software code ~~to determine a newer version~~; and

an upgrade processing unit for installing ~~the software included in the~~ software code ~~by abstracting software data in the software code in case the~~ code of the stored software is a new version associated with the software code if the version of the downloaded software code is newer than the version of the previously installed software code and if no error exists in the downloaded software code ~~without errors~~.

29. (Original) The apparatus of claim 28, wherein the software code includes data of an upgraded system software.

30. (Currently Amended) A method for upgrading a software, comprising the steps of:

checking whether a software code inserted in an advertisement broadcasting signal corresponds to a model of ~~the a~~ receiving apparatus or an error exists in the software code when ~~a the~~ broadcasting signal ~~in which the~~ software code ~~is inserted~~ is received;

comparing a version of ~~a the~~ software code and a version of a previously installed software code ~~to determine a newer version~~;

deleting the ~~code of the received software~~ code if the version of the software code is not newer than the version of the previously installed software code~~in case the code version of the software is not a new version~~ and checking whether the software will be upgraded if the version of the software code is newer than the version of the previously installed software code~~in case the version is a new version~~; and

installing the ~~software included in the code of the system software associated with the software code~~ according to ~~the~~ a response of from the ~~a~~ user.

31. (Original) The apparatus of claim 30, wherein the software code includes data of an upgraded system software.

32. (New) The apparatus of claim 1, wherein the upgrade processing unit automatically downloads the software code during broadcasting of the advertisement broadcasting signal regardless the version of the software code.

33. (New) The apparatus of claim 1, wherein the upgrade processing unit automatically downloads the software code during broadcasting of the digital advertisement broadcasting signal without switching to a predetermined channel.

34. (New) The method of claim 11, further comprising:

automatically downloading the software code during broadcasting of the digital advertisement broadcasting signal regardless the version of the software code.

35. (New) The method of claim 11, further comprising:

automatically downloading the software code during broadcasting of the advertisement broadcasting signal without switching to a predetermined channel.

36. (New) The apparatus of claim 28, wherein the upgrade processing unit automatically downloads the software code during broadcasting of the digital advertisement broadcasting signal regardless the version of the downloaded software code.

37. (New) The apparatus of claim 28, wherein the upgrade processing unit automatically downloads the software code during broadcasting of the digital advertisement broadcasting signal without switching to a predetermined channel.

38. (New) The method of claim 30, further comprising:

automatically downloading the software code during broadcasting of the digital advertisement broadcasting signal regardless the version of the software code.

39. (New) The method of claim 30, further comprising:

automatically downloading the software code during broadcasting of the advertisement broadcasting signal without switching to a predetermined channel.